

## TECAMID® 66 GF30 natural - Stock Shapes (rods, plates, tubes)

### Chemical Designation

PA 66 (Polyamide 66)

### Colour

grey-white

### Density

1.36 g/cm<sup>3</sup>

### Fillers

30% glass fibres

### Main features

- very good mechanical strength
- high heat deflection temperature
- high stiffness
- high strength
- excellent wear properties
- high fatigue strength
- resistant to many solvents
- high creep resistance

### Target Industries

- power engineering
- gear manufacturing
- automotive industry
- conveyor technology
- mechanical engineering
- construction industry
- others

Mechanical properties	condition	value	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	800,000 psi	ASTM D 638	
Tensile strength at yield	@ 73 °F	13,500 psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	10 %	ASTM D 638	
Flexural strength	@ 73 °F	19,575 psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	700,000 psi	ASTM D 790	
Compression strength	@ 73 °F, 1% strain	2,900 psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	17,000 psi	ASTM D 695	
Compression modulus	@ 73 °F	380,000 psi	ASTM D 695	
Impact strength (Izod)		1.25 ft-lbs/in	ASTM D 256	
Rockwell hardness	M Scale	88	ASTM D 785	
Thermal properties	condition	value	test method	comment
Melting temperature		499 °F	-	1) (1) publicly sourced data
Service temperature	Intermittent	338 °F	-	2) (2) publicly sourced data
Service temperature	Long Term	230 °F	-	3) (3) publicly sourced data
Thermal expansion (CLTE)		2.7*10 <sup>-5</sup> in/in/°F	ASTM D 696	4) (4) publicly sourced data
Specific heat		0.3 BTU/lb-F°	-	5) (5) Data obtained from public source
Thermal conductivity		2.71 BTU-in/hr-ft <sup>2</sup> -°F	-	6) (6) Data obtained from public source
Electrical properties	condition	value	test method	comment
surface resistivity		1.0*10 <sup>14</sup> Ω/square	ASTM D 257	1) (1) Data obtained from public source
Volume resistivity		1.0*10 <sup>14</sup> Ω*cm	-	2) (2) Data from public source
Other properties	condition	value	test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.25 %	ASTM D 570	
Moisture absorption	@ saturation, 73 °F	0.30 %	ASTM D 570	

→ Resin specification:  
 ASTM D6779-11 PA0110G30A00000 and ASTM D4066-01a (Reapproved 2008) PA0110G30A00000  
 Shapes specification: ASTM D5989-11 S-PA0101G3054444420

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at [www.ensingerplastics.com](http://www.ensingerplastics.com).